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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/268,930	03/16/99	DOBLER	L P03915US0

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IM22/0329

EXAMINER

CROSS, L

ART UNIT

PAPER NUMBER

1743

6

DATE MAILED: 03/29/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/268,930

Applicant(s)

Dobler et al

Examiner

LaToya Cross

Group Art Unit

1743



☒ Responsive to communication(s) filed on Jan 9, 2001

☒ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claim

- ☒ Claim(s) 1-11 and 14-17 is/are pending in the application.
- Of the above, claim(s) _____ is/are withdrawn from consideration.
- ☒ Claim(s) 1-11 is/are allowed.
- ☒ Claim(s) 14-17 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claims _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☐ All ☐ Some* ☒ None of the CERTIFIED copies of the priority documents have been
- ☐ received.
- ☐ received in Application No. (Series Code/Serial Number) _____.
- ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

- ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- ☐ Notice of References Cited, PTO-892
- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 2
- ☐ Interview Summary, PTO-413
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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DETAILED ACTION

This Office Action is in response to Applicants' amendments filed on January 9, 2001 and entered as Paper No. 5. Claims 1-11 and 14-17 are pending in the instant application. Claims 12 and 13 were canceled. Claims 14-17 were newly added.

Withdrawal of Rejections from Previous Office Action

The rejection of claims 1-11 under 35 USC 112, second paragraph is withdrawn in view of Applicants' amendments to the claim to redefine the term "film-like".

The rejection of claims 1-11 under 35 USC 103 over Tamaoku et al '548 is withdrawn in view of Applicants' amendment to claim 1 to incorporate "ethyl cellulose, surfactant, and tertiary octyl phenol" as components of the membrane.

Claim Rejections - 35 USC § 103

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Claims 14-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 4,201,548 to Tamaoku et al (hereinafter referred to as Tamaoku et al '548).

Tamaoku et al '548 disclose an apparatus and method for detecting and determining volatile substances such as ammonia. The apparatus includes a gas permeable membrane (2)

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produced from polymers such as polypropylene. The gas of the volatile substance is separated through the membrane and contacts a transparent color developing layer (3). The color developing carrier is impregnated with an indicator and results in a color change when in the presence of the volatile gas. Cover plates (1,4) are disclosed as being transparent plastic boards (col. 3, lines 29-34). At col. 2, lines 20-25, Tamaoku et al '548 teach also the use of vaporizing alkaline agents such as sodium and potassium carbonate. At col. 5, lines 1-9, the reference teaches that the vaporizing agents can be impregnated within porous filter paper. The determination of the volatile substance is carried out through the comparison of the degree of color change with a standard (col. 1, lines 40-59). The polymeric films of the examples have a pore diameter ranging from 0.016 to about 3 microns. Tamaoku et al '548 disclose the use of pH indicating chromogenic agents such as bromocresol purple, bromphenol blue and bromocresol green (col. 2, lines 46-68).

Tamaoku et al '548 differ from the instantly claimed invention in that it is not specifically taught that the alkaline agents adjust the pH to at least 10. However, the reference teaches that the alkaline agents are used as vaporizing agents and the detection sensitivity of the volatile substance is increased with the vaporizing agents. It would be obvious to the skilled artisan that in order for the alkaline agent to serve as a vaporizing agent and to produce gas, the vaporizing agent would have to increase the pH of the sample to a level sufficient to result in the formation of gas. A skilled artisan would also know that a sufficient pH level for formation of ammonia gas would be 10.

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Therefore, for the reasons set forth above, Applicants' claimed invention is deemed to be obvious, within the meaning of 35 U.S.C. 103 in view of the teachings of Tamaoku et al '548.

Allowable Subject Matter

3. Claims 1-11 are allowed.

Claims 1-11 are directed to a method for detecting ammonia in aqueous systems, wherein a sample volume of water is contacted with an alkaline agent and an indicator pad, simultaneously. The pad contains a hydrophobic membrane impregnated with ethyl cellulose, surfactant and tertiary octyl phenol. The prior art of record does not teach such a membrane impregnated with those reagents used in detecting ammonia in aqueous systems.

Citation of Relevant Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to LaToya I. Cross whose telephone number is (703) 305-7360. The examiner can normally be reached on Monday through Friday from 8:00 a.m. to 4:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden, can be reached at (703) 308-4037. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-5408.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

LIC 81C

March 26, 2001


Jill Warden
Supervisory Patent Examiner
Technology Center 1700